

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior version, and listings, of claims in the application:

### *Listing of Claims:*

1. (Currently Amended) A troubleshooting mentor system for automatically providing an administrator of a computing environment with diagnostic data and instructions to troubleshoot a ~~selected~~ problem event occurring in an entity of the computing environment, wherein said diagnostic data and instructions ~~provide are specifically designed to provide the~~ information and techniques relevant to enabling the administrator to troubleshoot said necessary to enable a administrator troubleshoot the selected problem event, wherein subsequent to said occurrence of said problem event, said troubleshooting mentor system retrieves said diagnostic data from said computing environment entity.

2. (Currently Amended) The troubleshooting mentor system of claim 1, wherein said troubleshooting mentor system retrieves said relevant diagnostic data from said computing environment entity in response to the system administrator indicating to the troubleshooting mentor system a desire to troubleshoot said problem event. ~~upon selection of said selected problem event, said troubleshooting mentor system automatically retrieves from relevant computing environment entities said diagnostic data.~~

3. (Currently Amended) The troubleshooting mentor system of claim 1, wherein said ~~selected problem event~~ is one of a plurality of problem events generated by at least one domain ~~manager-managers~~ in the computing environment, each said at least one domain manager managing an entity on the computing environment.

4. (Currently Amended) The troubleshooting mentor system of claim 1, wherein said troubleshooting mentor system comprises:

a problem event processor operable to cause ~~that causes~~ a display of said plurality of problem events that have occurred, and to determine ~~that determines~~ which of a plurality of troubleshooting ~~a troubleshooting~~ types corresponds to said selected problem event; and

a troubleshooting profile manager operable to execute ~~that executes~~ a predetermined troubleshooting profile associated with said troubleshooting type of said selected problem event; and

~~a troubleshooting portal view manager that executes said retrieved troubleshooting profile and one or more troubleshooting data miner modules referenced in said retrieved troubleshooting profile, each said troubleshooting data miner module generating or causing the generation of said diagnostic data and said instructions, wherein said profile manager displays said diagnostic data generated by said referenced one or more troubleshooting data miner modules.~~

5. (Currently Amended) The troubleshooting mentor system of ~~claim 4~~, claim 41, wherein said data miner modules comprise ~~include~~ a first data miner module operable to generate or cause ~~that generates or causes~~ the generation of said troubleshooting instructions, and wherein said troubleshooting portal view manager is operable to display ~~displays~~ said troubleshooting instructions produced by execution ~~the execution~~ of said first data miner module.

6. (Currently Amended) The troubleshooting mentor system of claim 3, wherein said computing environment includes a network system, and wherein said at least one domain manager ~~domain managers~~ comprise one or more of the group consisting of:

network managers configured to manage ~~that manage~~ individual and collections of networks;

software application managers configured to manage ~~that manage~~ software applications executing on a node or server of the computing environment;

database managers configured to manage ~~that manage~~ databases executing on a node or server of the network system; and

server managers configured to assist ~~that assist~~ a network administrator manage ~~manage the~~ operations of each server in a network ~~network~~.

7. (Currently Amended) The troubleshooting mentor system of claim 4, ~~claim 3~~, wherein said problem event processor is further operable to normalize ~~normalizes~~ said plurality of problem events for display.

8. (Original) The troubleshooting mentor system of claim 3, wherein said event-type-specific information is displayed in accordance with viewpoint layout information included in said selected troubleshooting profile.

9. (Currently Amended) The troubleshooting mentor system of claim 3, ~~claim 1~~, wherein said problem events comprise:

problem events automatically-generated by said at least one domain manager; ~~domain managers~~; and

problem events identified by a user of the computing environment and manually entered into said troubleshooting ~~the troubleshooting~~ mentor system.

10. (Currently Amended) The troubleshooting mentor system of claim 41, ~~claim 1~~, wherein said display of said diagnostic data can be modified by administrator ~~the administrator~~ inputs specifying a change in said diagnostic data, and wherein said troubleshooting portal view manager is further operable to access ~~accesses~~ said domain managers as necessary to obtain or cause the generation of said modified diagnostic data.

11. (Currently Amended) The troubleshooting mentor system of claim 41, ~~claim 1~~, wherein said problem event processor is further operable to generate ~~generates~~ event data associated with said selected problem event, said event data comprising:

including an original event ID generated by a domain manager that manages an entity of the computing device that caused said problem event to occur;

the domain manager, said troubleshooting type of said selected problem event; and  
event, and information pertaining to said to the source entity that caused the  
generation of said problem event.

12. (Currently Amended) The troubleshooting mentor system of claim 1, wherein said problem event processor comprises:

an event consolidator operable to receive ~~that receives~~ problem events from domain managers, said problem events generated by different domain managers having different formats, said event consolidator operable to process ~~processes~~ said problem events and, in response to each received problem event, to generate ~~generates~~ a normalized event identifier having a standard format; and

an event type determinator operable to categorize ~~that categorizes~~ received problem events as being one of a plurality of troubleshooting types, each said troubleshooting type indicating diagnostic data and troubleshooting procedures likely to be required to be performed or analyzed to successfully troubleshoot each said problem event, and to generate ~~which generates~~ said troubleshooting type for said selected problem event.

13. (Currently Amended) The troubleshooting mentor system of claim 1, wherein said problem event processor comprises:

an event consolidator operable to receive ~~that receives~~ problem events from domain managers and that generate ~~generates~~ a representation of the selected problem event, said representation including said troubleshooting type.

14. (Currently Amended) The troubleshooting mentor system of claim 11, ~~claim 4~~, wherein said troubleshooting profile manager comprises:

a repository of troubleshooting profiles each associated with a particular troubleshooting type of problem event;

repository ~~a repository~~ of mapping data that associates each said troubleshooting type and one of said troubleshooting profiles;

a profile selector that, based on said troubleshooting type of said selected problem event, is operable to retrieve ~~retrieves~~ from said repository one of said troubleshooting profiles that is to be implemented for said selected problem event;

and a profile conditioner operable to populate ~~that populates~~ said retrieved troubleshooting profile with at least a portion of said event data.

15. (Currently Amended) The troubleshooting mentor system of claim 4, wherein said troubleshooting profile is an extensible, executable software program that is operable to invoke ~~invokes~~ a predetermined combination of at least one of said one or more data miners that generate or cause the generation of context-sensitive troubleshooting data and instructions to assist the administrator diagnose and correct the cause of said selected problem event.

16. (Original) The troubleshooting mentor system of claim 14, wherein said repository of mapping data is a look-up-table.

17. (Currently Amended) The troubleshooting mentor system of claim 14, wherein said troubleshooting profile manager further comprises:

a troubleshooting profile editor operable to enable ~~that enables~~ the administrator to modify, add or delete contents ~~the contents~~ of said mapping data and said repository ~~database~~ of said troubleshooting profiles.

18. (Currently Amended) The troubleshooting mentor system of claim 14, wherein each said troubleshooting profile comprises:

portal view layout information for use by ~~said troubleshooting~~ ~~troubleshooting-portal~~ view manager to generate and troubleshooting GUI in the generation of a TS view window;

one or more references to said one or more troubleshooting data miner modules that are to be utilized to obtain said diagnostic ~~diagnostic~~ data and instructions relevant to troubleshooting said selected ~~selected~~ problem event; and

troubleshooting data miner module configuration information parameters that provide requisite information to said one or more referenced troubleshooting data miner modules.

19. (Currently Amended) The troubleshooting mentor system of ~~claim 4,~~ claim 41, wherein said troubleshooting portal view manager comprises:

a database of said one or more troubleshooting data miner modules;

a data miner manager operable to invoke at least one of ~~that invokes~~ said one or more troubleshooting data miner modules referenced in said troubleshooting profile; and

a portal view window generator operable to display ~~that displays~~ said diagnostic data and said troubleshooting instructions generated by said referenced data miner modules in accordance with said portal view layout information contained within said troubleshooting profile.

20. (Original) The troubleshooting mentor system of claim 19, wherein said troubleshooting data miner modules are executable software programs that, when executed, access, call, query, or otherwise interface with external entities to retrieve or cause the generation of diagnostic data and troubleshooting instructions.

21. (Currently Amended) The troubleshooting mentor system of claim 4, wherein said one or more troubleshooting data miner modules comprise one or more of the group consisting of:

software programs operable to mine ~~that mine~~ data from said at least one domain manager; ~~the database of one or more domain managers~~;

software programs operable to access ~~that access~~ knowledge databases provided by a customer of the computing environment; and

software programs operable to call ~~that call~~ or invoke system utilities and tools that, when executed, generate said diagnostic data.

22. (Original) The troubleshooting mentor system of claim 4, wherein said computing environment comprises a distributed network system.

23. (Currently Amended) An apparatus that displays context-sensitive ~~troubleshooting~~ information ~~relevant to the diagnosis of~~ to facilitate the troubleshooting of a particular problem event which has occurred in an entity of ~~occurring~~ a computing environment, wherein said troubleshooting information comprises ~~includes~~ instructions for troubleshooting said particular problem event and diagnostic data retrieved from at least the entity in which the problem event has previously occurred, and wherein said context-sensitive troubleshooting information is generated automatically and without network administrator action subsequent to identifying said particular problem event.

24-25. (Canceled)

26. (Currently Amended) The apparatus of ~~claim 24~~, claim 23, comprising:

a database of troubleshooting data miner modules each configured to generate or cause generating or causing the generation of one or more of either said troubleshooting troubleshooting instructions and said diagnostic diagnostic data;

a repository of troubleshooting profiles each configured to reference refereneing one or more data miner modules that, when executed, cause result in the generation of troubleshooting instructions and diagnostic data for a particular type of problem event;

a memory device configured to store in which is stored data that associates each said problem event type with a troubleshooting profile; and

a troubleshooting software module operable to display that displays problem events received from domain managers, and to execute and that determines said type of a problem event selected by an administrator, retrieving a troubleshooting profile retrieved from said repository that is associated with said problem event type and executing same to cause invocation the invocation of said one or more referenced troubleshooting data miner modules, and to display displaying said diagnostic data and troubleshooting instructions generated by said one or more referenced troubleshooting data miner modules.

27. (Currently Amended) A method for displaying context-sensitive information relevant to a particular problem event which has occurred occuring in an entity of a computing environment, comprising:

~~A) receiving a selected problem event;~~

retrieving, from the entity of the computing environment in which the problem event has occurred, ~~B) generating contextual instructions and diagnostic data relevant pertinent to~~ troubleshooting the particular problem event; and

displaying ~~C) displaying said instructions and said diagnostic data on a display device.~~



28. (Currently Amended) The method of claim 27, wherein ~~receiving a selected problem event prior to said retrieving of diagnostic data~~, the method further comprises:

receiving 1) ~~receiving~~ a plurality of problem events each generated by a domain manager residing in the computing environment;

storing 2) ~~storing~~ said received problem events in a repository of problem events that have occurred in the computing environment;

displaying a representation of 3) ~~displaying~~ said plurality of stored problem events in an interactive display;

receiving an indication that one of the plurality of problem events is said particular problem event; 4) ~~receiving an network administrator selection of one of the displayed problem events; and~~

generating 5) ~~generating an output indicating which of said plurality of problem events is said selected problem event.~~

29. (Currently Amended) The method of claim 27, wherein further comprising:

~~generating contextual diagnostic data pertinent to troubleshooting the particular problem event comprises:~~

determining 1) ~~determining~~ which type of problem event is said selected problem event; and

determining 2) ~~determining~~ which troubleshooting diagnostic data ~~and instructions~~ to display based on said type of said selected problem event.

30. (Currently Amended) The method of claim 29, wherein determining which troubleshooting diagnostic data and instructions to display comprises:

~~providing a) providing~~ a database of troubleshooting data miner modules, each said troubleshooting data miner module generating or causing the generation of diagnostic data or instructions related to a particular network entity or function;

~~b) generating a database of troubleshooting profiles each referencing a predetermined one or more troubleshooting data miner module to display diagnostic data and troubleshooting instructions pertinent to a particular type of problem event;~~

~~e) retrieving from said database of troubleshooting profiles a troubleshooting profile associated with said type of said selected problem event; and~~

~~d) invoking said retrieved troubleshooting profile and said one or more troubleshooting data miner modules referenced therein.~~

31-34. (Canceled)

35. (Currently Amended) A computer program product comprising a computer readable medium having computer program logic recorded thereon for enabling a processor in a computer system to automatically display diagnostic data and instructions on how to troubleshoot a selected problem event which has occurred in a computing environment comprising said computer system, wherein said diagnostic data and instructions provide information and techniques relevant to enabling an administrator to troubleshoot are specifically relevant to troubleshooting said selected problem event.

36. (Currently Amended) The computer program product of claim 35, wherein said computer readable medium comprises:

a database of ~~said~~ troubleshooting data miner modules each configured to generate or cause generating or causing the generation of at least one of either troubleshooting instructions and diagnostic data to be used in connection with troubleshooting of a related one of a plurality of problem events including said selected problem event;

~~a repository of troubleshooting profiles each referencing at least one or more of said plurality of data miner modules that result in the generation of said at least one of either troubleshooting instructions and diagnostic data to be used in connection with troubleshooting for a particular type of problem event; and~~

~~a memory device configured to store in which is stored data that associates each said problem event type with a one of the troubleshooting profile; profiles;~~

~~and wherein said computer program logic enables the processor to display problem events received from domain managers on the network and that determines the type of a problem event selected by a user and retrieves a troubleshooting profile from said repository that is associated with said type, and that executes said retrieved troubleshooting profile causing the invocation of said referenced troubleshooting data miner modules, displaying said diagnostic data and troubleshooting instructions generated by said referenced troubleshooting data miner modules.~~

37-40. (Canceled)

41. (New) The troubleshooting mentor system of claim 4, wherein said troubleshooting mentor system further comprises:

a troubleshooting portal view manager operable to execute said retrieved troubleshooting profile and one or more troubleshooting data miner modules referenced in said retrieved troubleshooting profile, wherein when executed each said troubleshooting data miner module generates or causes generation of said diagnostic data and said instructions, wherein said profile manager is further operable to display said diagnostic data generated by said referenced one or more troubleshooting data miner modules.

42. (New) The method of claim 30, wherein determining which troubleshooting diagnostic data and instructions to display further comprises:

generating a database of troubleshooting profiles each referencing a predetermined one or more troubleshooting data miner module to display diagnostic data and troubleshooting instructions pertinent to a particular type of problem event.

43. (New) The method of claim 42, wherein determining which troubleshooting diagnostic data and instructions to display further comprises:

retrieving from said database of troubleshooting profiles a troubleshooting profile associated with said type of said selected problem event.

44. (New) The method of claim 43, wherein determining which troubleshooting diagnostic data and instructions to display further comprises:

invoking said retrieved troubleshooting profile and said one or more troubleshooting data miner modules referenced therein.

45. (New) The computer program product of claim 36, wherein said computer readable medium further comprises:

a repository of troubleshooting profiles each referencing at least one of said plurality of data miner modules that result in the generation of said at least one of either troubleshooting instructions and diagnostic data to be used in connection with troubleshooting a particular type of problem event.

46. (New) The computer program product of claim 45, wherein said computer readable medium further comprises:

a memory device configured to store data that associates each said problem event type with one of the troubleshooting profiles;

wherein said computer program logic enables the processor to display problem events received from domain managers on the network and that determines the type of a problem event selected by a user and retrieves a troubleshooting profile from said repository that is associated with said type, and that executes said retrieved troubleshooting profile causing the invocation of said referenced troubleshooting data miner modules, displaying said diagnostic data and troubleshooting instructions generated by said referenced troubleshooting data miner modules.